REMARKS

This amendment is in response to the Office Action dated February 12, 2004, (Paper No. 15) wherein the Examiner indicated that this application is in condition for allowance except for formal matters, and that prosecution on the merits is closed in accordance with the practice under *Ex Parte Quayle*, 1935 CD 11, 453 O. G. 213. At the Examiner's suggestion, the abstract is rewritten in a simple narrative style devoice of legal language. No new matter has been added. It is therefore respectfully requested that the application be passed to issue.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no.509952000100. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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Respectfully submitted,

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MAXIMIZING EXPECTED GENERALIZATION FOR LEARNING COMPLEX QUERY CONCEPTS

ABSTRACT OF THE DISCLOSURE

A method of learning user query concept for searching visual images encoded in computer readable storage media comprising: providing a multiplicity of ~~respective~~ sample images encoded in a computer readable medium; providing a multiplicity of ~~respective~~ sample expressions ~~encoded in computer readable medium~~ that ~~respectively~~ correspond to ~~respective~~ sample images and in which ~~respective~~ terms of ~~such respective~~ the sample expressions represent ~~respective~~ features of corresponding sample images; defining a user query concept sample space bounded by a boundary k-CNF expression ~~which designates a more specific concept within the user query concept sample space~~ and by a boundary k-DNF expression ~~which designates a more general concept within the user query concept sample space~~; refining the user query concept sample space by, ~~selecting multiple sample images from within the user query concept sample space; presenting the multiple selected sample images to the user~~; soliciting user feedback as to which of the multiple presented sample images are close to the user's query concept; ~~wherein refining the user query concept sample space further includes, refining the boundary k-CNF expression by, identifying respective terms of respective sample expressions that contradict corresponding respective disjunctive terms of the boundary k-CNF expression for those respective sample expressions corresponding to respective sample images indicated by the user as close to the user's query concept; determining which, if any, respective disjunctive terms of the boundary k-CNF expression identified as contradicting corresponding respective terms of sample expressions indicated by the user as close to the user's query concept to remove from the boundary k-CNF expression;~~ removing from the boundary k-CNF expression ~~respective~~ disjunctive terms based upon the solicited user feedback; ~~determined to be removed; wherein refining the user query concept sample space further includes, refining the boundary k-DNF expression by, identifying~~

~~respective terms of respective sample expressions that do not contradict corresponding respective conjunctive terms of the boundary k-DNF expression for those respective sample expressions corresponding to respective sample images indicated by the user as not close to the user's query concept; determining which, if any, respective conjunctive terms of the boundary k-DNF expression identified as not contradicting corresponding respective terms of sample expressions indicated by the user as not close to the user's query concept to remove from the boundary k-DNF expression;~~ and removing from the boundary k-DNF expression respective conjunctive terms based upon the solicited user feedback ~~determined to be removed~~.